APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,989	07/15/2003	Giora Biran	IL920000078US1	8807

54856   7590   10/19/2007
LOUIS PAUL HERZBERG
3 CLOVERDALE LANE
MONSEY, NY 10952

EXAMINER
NGUYEN, TANH Q

ART UNIT	PAPER NUMBER
2182	

MAIL DATE	DELIVERY MODE
10/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 August 2007 (RCE)</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-22</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>15 July 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June

29, 2007 has been entered.

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2.   Claims 1-10, 17-18, 21-22 are rejected under 35 U.S.C. 112, first paragraph, as

failing to comply with the enablement requirement. The claim(s) contains subject

matter, which was not described in the specification in such a way as to enable one

skilled in the art to which it pertains, or with which it is most nearly connected, to make

and/or use the invention.

Claim 1 recites a "buffer storing indications of events" in line 2, "said apparatus

for transferring interrupts from the peripheral device to a host computer" in lines 3-4",

moving the contents of the buffer to the payload portion of the control data block, and

sending the control data block to the host computer system" in lines 7-9. The recitations

suggest that indications of events are stored in the buffer and that the indications of

events (the contents of the buffer) are moved to a payload portion of the control data

block and sending the control data block to the host computer system. The recitations

also suggest that only interrupts from the indications of events (i.e. not the indications of

events) are transferred from the peripheral device to the host computer system. It

appears that the specification only discloses transferring all indications of events in the

control block to the host computer.

3.   Claims 11-16, 19-20 are rejected under 35 U.S.C. 112, first paragraph, as failing

to comply with the enablement requirement. The claim(s) contains subject matter,

which was not described in the specification in such a way as to enable one skilled in

the art to which it pertains, or with which it is most nearly connected, to make and/or use

the invention.

It appears that there is no support for "moving the contents of the buffer to the

corresponding fields of the payload portion" - as page 38, lines 25-26 merely discloses

"when preset conditions are met, an Interrupt Control Block (ICB) 1680 is generated by

the ISOC 120 from the information stored in the interrupt FIFO 1660".

4.   Claims 13-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the enablement requirement. The claim(s) contains subject matter, which

was not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 13 recites "at least a predetermined plurality of indications is stored in the buffer". Claim 14 recites "at least one indication is stored in the buffer". Claim 15 recites "a count indicative of the number of indications included in the payload portion". Claim 1 suggests storing only interrupts in the buffer and does not suggest storing indications other than interrupts in the buffer. The claims suggest that interrupts and indications are two different entities, while the specification only discloses only one entity being stored in the buffer and the count being indicative of only one entity.

5.   Claims 10, 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The examiner cannot find support for the limitations of the claims. In particular, it is not clear what constitute <u>the claimed apparatus</u>, <u>the claimed host processing system</u>, <u>the claimed memory of the host processing system</u>, <u>the claimed data processing system</u>, <u>the claimed host computer</u>, and <u>the claimed memory of the host computer system</u>. Applicant is required to specifically point out where to find the support for the limitations of the claims in the specification, by page and line number - and in particular, applicant is required to map out each of the elements claimed with the teachings of the specification.

6.   No art rejection was made to claims 1-16, 21-22 because the scope of the claims

is ambiguous, and it is not possible for the examiner to apply prior art without making a

great deal of speculation.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
> use or on sale in this country, more than one year prior to the date of application for patent in the United
> States.

8.   Claims 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated Raasch

et al. (US 5,333,273).

9.   As per claims 17, 19, Raasch teaches a computer program product (or article of

manufacture) comprising a computer usable medium [138, FIG. 1] having computer

readable program code means [BIOS: col. 5, lines 18-21] embodied therein for causing

transfer of interrupts [col. 4, lines 66-68], the computer readable program code means in

said computer program product (or article of manufacture) comprising computer

readable program code means [BIOS: col. 5, lines 18-21] for causing a computer [100,

FIG. 1] to effect the functions of the apparatus of claim 1 (or the method of claim 11) -

as the BIOS would cause a computer to effect the functions of any apparatus, hence

including functions of the apparatus of claim 1; and as the BIOS would cause a

computer to effect the steps of any method, hence including the steps of the method of

claim 11.

10.   As per claim 18, Raasch teaches a computer program product comprising a

computer usable medium [138, FIG. 1] having computer readable program code means

[BIOS: col. 5, lines 18-21] embodied therein for causing data processing [col. 5, lines

18-31], the computer readable program code means in said computer program product

comprising computer readable program code means [BIOS: col. 5, lines 18-21] for

causing a computer [100, FIG. 1] to effect the functions of the apparatus of claim 10 - as

the BIOS would cause the computer to effect the functions of any apparatus, hence

including the functions of the apparatus of claim 10.

11.   As per claim 20, Raasch teaches a program storage device [138, FIG. 1]

readable by machine [100, FIG. 1], tangibly embodying a program of instructions [BIOS:

col. 5, lines 18-21] executable by the machine to perform method steps for transferring

interrupts [col. 4, lines 66-68], said method steps comprising the steps of claim 11 (the

BIOS would cause a computer to effect the steps of any method, hence including the

steps of the method of claim 11).

Response to Arguments

12.   Applicant's arguments with respect to the pending claims have been fully

considered but they are not persuasive or moot in view of the new grounds of rejections.

13.   Applicant's arguments with respect to the 112 rejections are moot in view of the

new ground of rejection.

14.   Applicant argues with respect to the art rejection that Raasch is not concerned

with indications of events or a preset condition. The argument is not persuasive

because Raasch was not relied upon to teach indications of events or a preset

condition, because the claims do not require such limitations, and because applicant

appears to misinterpret the rejections.

Claim 17 only requires a program code means for causing transfer of interrupts,

and a program code means for causing a computer to <u>effect</u> all functions of the

apparatus of claim 1. Claim 18 only requires a program code means for causing a

computer to <u>effect</u> all functions of the apparatus of claim 10. Claim 19 only requires a

program code means for causing transfer of interrupts, and a program code means for

causing a computer to <u>effect</u> all steps of the method of claim 11. Claim 20 only requires

a program of instructions to <u>perform method steps for transferring interrupts</u>, the method

steps comprising steps of the method steps of the method of claim 11.

To the extent claimed, Raasch teaches a program code means causing transfer

of interrupts of claims 17, 19; a program code means for causing a computer to <u>effect</u> all

functions of claims 1, 10 (as claimed in claims 17-18); a program code means for

causing a computer to <u>effect</u> all steps of claim 11 (as claimed in claim 19); a program of

instructions to perform method steps for transferring interrupts of claim 20, the method

steps comprising all steps of the method of claim 11 - because Raasch teaches a BIOS

and a BIOS would cause a computer to effect the functions of any apparatus, and

because a BIOS would cause a computer to effect/perform the steps of any method.

Note that the claims do not recite any function/step that requires limitations

concerned with indications of events or preset condition.

15.   In addition, to help the examiner better understand the scope of the

claimed invention and further the prosecution, the examiner requests that

applicant identify - by reference to labels in the drawings, and/or page and line

numbers in the specification - the following elements and/or steps:

elements: apparatus, buffer, indications of interrupts, plurality of ports,

peripheral device, host computer system, controller (in claim 1); communications

device (in claims 8-9); data communications network interface (in claims 9-10);

host processing system, data processing system (in claim 10)

steps: the apparatus transferring interrupts, moving the contents of the

buffer to the payload portion of the control data block (claim 1); storing

interrupts, moving the contents of the buffer to the corresponding fields of the

payload portion (in claim 11).

Conclusion

16.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tanh Q. Nguyen whose telephone number is 571-272-

4154. The examiner can normally be reached on M-F 9:30AM-7:00PM.
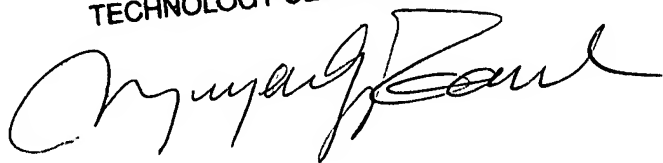
If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TANH Q NGUYEN
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100

October 12, 2007

TQN
October 12, 2007